

In the Claims

1. (Withdrawn) A global content directory for a distributed plurality of seller databases, each seller database being associated with a corresponding seller and distinct from other seller databases in the distributed plurality of seller databases, the global content directory comprising:

a directory structure comprising a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and defining one or more attributes of the products categorized in the product class, each product class uniquely identified by a class identifier (CID);

one or more pointers associated with each product class in the plurality of product classes, each pointer identifying the seller database in the distributed plurality of seller databases in which product data enabling a product transaction is stored for products associated with the product class, the seller database identified by the pointer being associated with its corresponding seller and being distinct from the other seller databases in the distributed plurality of seller databases; and

a search interface operable to:

communicate, in response to a selection of a product class by a user of the global content directory, a search query for product data to the one or more seller databases identified by the one or more pointers associated with the selected product class, each seller database being associated with its corresponding seller and distinct from the other seller databases in the plurality of seller databases; and

receive, in response to the search query, search results comprising one or more product identifiers (PIDs) that each uniquely identify a particular product in the selected product class, the CID for the selected product class and the PID for a particular product collectively providing a globally unique identifier (GUID) for the particular product.

2. (Withdrawn) The directory of Claim 1, wherein the CID comprises a class number of a first product class concatenated with class numbers of one or more parent product classes of the first product class which are at higher levels in the class hierarchy than the first product class.

3. (Withdrawn) The directory of Claim 2, wherein the CID comprises the class numbers of every parent product class of the first product class.

4. (Withdrawn) The directory of Claim 1, wherein the search results further comprise a repository identifier (RID) for each particular product, the RID uniquely identifying a particular seller of the product uniquely identified by the GUID.

5. (Withdrawn) The directory of Claim 4, wherein the RID identifies the seller database in the distributed plurality of seller databases that includes product data associated with the product uniquely identified using the GUID.

6. (Withdrawn) The directory of Claim 4, wherein the RID comprises an electronic address associated with the seller.

7. (Withdrawn) The directory of Claim 4, wherein the RID identifies an electronic address of the seller stored at the global content directory.

8. (Currently amended) A computer-implemented method for conducting facilitating a commercial transaction involving a product, the method performed using one or more computer systems each comprising one or more processing units and one or more memory units, the method comprising:

using the one or more computer systems, communicating a globally unique identifier (GUID) for a particular product to a seller of the particular product, the GUID comprising:

a class identifier (CID) that uniquely identifies at least one product class in which the product is categorized, along with a plurality of other products, within a class hierarchy of a global content directory for a distributed plurality of seller databases, each seller database being associated with a corresponding seller and distinct from the other seller databases in the distributed plurality of seller databases, the product class defining one or more attributes of the products categorized in the class; and

a product identifier (PID) that uniquely identifies the particular product from among the plurality of products categorized in the product class uniquely identified by the CID; and

using the one or more computer systems, specifying to the seller a desired commercial transaction involving the particular product uniquely identified by the GUID to facilitate the desired commercial transaction involving the particular product uniquely identified by the GUID.

9. (Original) The method of Claim 8, wherein the CID comprises a class number of a first product class concatenated with class numbers of one or more product classes of the first product class which are at higher levels in the class hierarchy than the first product class.

10. (Original) The method of Claim 9, wherein the CID comprises the class numbers of every parent product class of the first product class.

11. (Original) The method of Claim 8, wherein the seller of a particular product is uniquely identified according to a repository identifier (RID) associated with the GUID uniquely identifying the particular product.

12. (Original) The method of Claim 11, wherein the RID comprises an electronic address associated with the seller.

13. (Original) The method of Claim 11, wherein the RID identifies an electronic address of the seller stored at the global content directory.

14. (Original) The method of Claim 8, further comprising communicating to the seller a buyer identifier for a buyer specifying the desired commercial transaction.

15. (Original) The method of Claim 14, wherein the buyer identifier is associated with logistical information for the buyer enabling the desired commercial transaction to be conducted without further action by the buyer.

16. (Original) The method of Claim 15, wherein the buyer identifier is associated with the logistical information at the seller to enable the desired commercial transaction.

17. (Original) The method of Claim 15, wherein the buyer identifier is associated with the logistical information at the global content directory to enable the desired commercial transaction.

18. (Original) The method of Claim 15, wherein the logistical information comprises information selected from the group consisting of payment information and shipping information.

19. (Withdrawn) A product uniquely identifiable according to a globally unique identifier (GUID), the GUID comprising:

a class identifier (CID) that uniquely identifies at least one product class in which the product is categorized, along with a plurality of other products, within a class hierarchy of a global content directory, the product class defining one or more attributes of the products categorized in the class, the at least one product class being one of a plurality of product classes organized in the class hierarchy, each of the plurality of product classes categorizing a plurality of products and defining one or more attributes of the products categorized in the product class, one or more pointers being associated with each product class in the plurality of product classes, each pointer identifying the seller database in the distributed plurality of seller databases in which product data enabling a commercial transaction is stored for products associated with the product class, the seller database identified by the pointer being associated with its corresponding seller and being distinct from the other seller databases in the distributed plurality of seller databases; and

a product identifier (PID) that uniquely identifies the particular product from among the plurality of products categorized in the product class uniquely identified by the CID;

the CID and PID collectively providing the GUID, the GUID operable to be specified or determined to facilitate a commercial transaction involving the product.

20. (Withdrawn) The product of Claim 19, wherein the CID comprises a class number of a first product class concatenated with class numbers of one or more parent product classes of the first product class which are at higher levels in the class hierarchy than the first product class.

21. (Withdrawn) The product of Claim 20, wherein the CID comprises the class numbers of every parent product class of the first product class.

22. (Withdrawn) The product of Claim 21, wherein a repository identifier (RID) uniquely identifies a particular seller of the product uniquely identified by the GUID.

23. (Withdrawn) The product of Claim 22, wherein the RID identifies the seller database in the distributed plurality of seller databases that includes product data associated with the product uniquely identified by the GUID.

24. (Withdrawn) The product of Claim 22, wherein the RID comprises an electronic address associated with the seller.

25. (Withdrawn) The product of Claim 22, wherein the RID identifies an electronic address of the seller stored at the global content directory.

26. (Withdrawn) The product of Claim 19, wherein a feature identifier (FID) uniquely identifies a particular feature of the product uniquely identified by the GUID.

27. (Withdrawn) A global content directory for a distributed plurality of seller databases, each seller database being associated with a corresponding seller and distinct from other seller databases in the distributed plurality of seller databases, the global content directory comprising:

a directory structure comprising a plurality of product classes organized in a hierarchy, each product class categorizing a plurality of products and defining one or more attributes of the products categorized in the product class, each product class uniquely identified by a class identifier (CID) comprising a class number of a first product class concatenated with class numbers of a plurality of parent product classes of the first product class which are at higher levels in the class hierarchy than the first product class;

one or more pointers associated with each product class in the plurality of product classes, each pointer identifying the seller database in the distributed plurality of seller databases in which product data enabling a product transaction is stored for products associated with the product class, the seller database identified by the pointer being associated with its corresponding seller and being distinct from the other seller databases in the distributed plurality of seller databases; and

a search interface operable to:

communicate, in response to a selection of a product class by a user of the global content directory, a search query for product data to the one or more seller databases identified by the one or more pointers associated with the selected product class, each seller database being associated with its corresponding seller and distinct from the other seller databases in the plurality of seller databases; and

receive, in response to the search query, search results comprising one or more product identifiers (PIDs) that each uniquely identify a particular product in the selected product class, the CID for the selected product class and the PID for a particular product collectively providing a globally unique identifier (GUID) for the particular product.

28. (Withdrawn) The directory of Claim 27, wherein the search interface is further operable to receive, in response to the search query, a repository identifier (RID) for the particular product, the RID uniquely identifying a seller of the particular product uniquely identified by the GUID according to an electronic address of the seller.

29. (Currently amended) A computer-implemented method for conducting facilitating a commercial transaction involving a product, the method performed using one or more computer systems each comprising one or more processing units and one or more memory units, the method comprising:

using the one or more computer systems, communicating a globally unique identifier (GUID) for a particular product to a seller of the particular product, the GUID comprising:

a class identifier (CID) that uniquely identifies at least one product class in which the product is categorized, along with a plurality of other products, within a class hierarchy of a global content directory for a distributed plurality of seller databases, each seller database being associated with a corresponding seller and distinct from the other seller databases in the distributed plurality of seller databases, the product class defining one or more attributes of the products categorized in the class, the CID comprising a class number of a first product class concatenated with class numbers of a plurality of parent product classes of the first product class which are at higher levels in the class hierarchy than the first product class; and

a product identifier (PID) that uniquely identifies the particular product from among the plurality of products categorized in the product class uniquely identified by the CID; and

using the one or more computer systems, specifying to the seller a desired commercial transaction involving the particular product uniquely identified by the GUID to facilitate the desired commercial transaction involving the particular product uniquely identified by the GUID; and

using the one or more computer systems, uniquely identifying the seller of the particular product according to a repository identifier (RID) associated with the GUID to further facilitate the desired commercial transaction involving the particular product uniquely identified by the GUID.

30. (Currently amended) The method of Claim 29, ~~further comprising uniquely identifying the seller of the product according to a repository identifier (RID) associated with the GUID, wherein the RID comprising comprises~~ an electronic address associated with the seller.



31. (Withdrawn) A product uniquely identifiable according to a globally unique identifier (GUID), the GUID comprising:

a class identifier (CID) that uniquely identifies at least one product class in which the product is categorized, along with a plurality of other products, within a class hierarchy of a global content directory, the product class defining one or more attributes of the products categorized in the class, the CID comprising a class number of a first product class concatenated with class numbers of a plurality of parent product classes of the first product class which are at higher levels in the class hierarchy than the first product class, the at least one product class being one of a plurality of product classes organized in the class hierarchy, each of the plurality of products classes categorizing a plurality of product and defining one or more attributes of the products categorized in the product class, one or more pointers being associated with each product class in the plurality of product classes, each pointer identifying the seller database in the distributed plurality of seller databases in which product data enabling a commercial transaction is stored for products associated with the product class, the seller database identified by the pointer being associated with its corresponding seller and being distinct from the other seller databases in the distributed plurality of seller databases; and

a product identifier (PID) that uniquely identifies the particular product from among the plurality of products categorized in the product class uniquely identified by the CID;

the CID and PID collectively providing the GUID, the GUID operable to be specified or determined to facilitate a commercial transaction involving the product.

32. (Withdrawn) The product of Claim 31, wherein a repository identifier (RID) uniquely identifies a particular seller of the product uniquely identified by the GUID according to an electronic address associated with the seller.